

Title (en)  
Surgical access device

Title (de)  
Chirurgische Zugangsvorrichtung

Title (fr)  
Dispositif d'accès chirurgical

Publication  
**EP 2168511 A3 20100714 (EN)**

Application  
**EP 09252312 A 20090929**

Priority  
US 24276508 A 20080930

Abstract (en)  
[origin: EP2168511A2] Various devices are provided for allowing multiple surgical instruments to be inserted through a single surgical access device at variable angles of insertion, allowing for ease of manipulation within a patient's body while maintaining insufflation. Safety shields and release mechanisms are also provided for use with various surgical access devices.

IPC 8 full level  
**A61B 17/34** (2006.01)

CPC (source: EP US)  
**A61B 1/018** (2013.01 - US); **A61B 17/0218** (2013.01 - US); **A61B 17/3423** (2013.01 - US); **A61B 17/3462** (2013.01 - EP US); **A61B 2017/3447** (2013.01 - EP US); **A61B 2017/3449** (2013.01 - EP US); **A61B 2017/3466** (2013.01 - EP US); **A61B 2505/05** (2013.01 - US)

Citation (search report)  
• [XP] WO 2008121294 A1 20081009 - PNAVEL SYSTEMS INC [US], et al  
• [XP] WO 2009035663 A2 20090319 - SYNECOR LLC [US], et al  
• [XP] WO 2008149332 A1 20081211 - ATROPOS LTD [IE], et al  
• [XI] US 6162196 A 20001219 - HART CHARLES C [US], et al  
• [XI] WO 0217800 A2 20020307 - GENZYME CORP [US]  
• [A] EP 1716813 A1 20061102 - TYCO HEALTHCARE [US]

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Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)  
AL BA RS

DOCDB simple family (publication)  
**EP 2168511 A2 20100331; EP 2168511 A3 20100714; EP 2168511 B1 20120711**; AU 2009222423 A1 20100415; AU 2009222423 B2 20141218; BR PI0904882 A2 20110315; BR PI0904882 B1 20191105; BR PI0904882 B8 20210622; CA 2680917 A1 20100330; CA 2680917 C 20171017; CN 101711687 A 20100526; CN 101711687 B 20130807; JP 2010082449 A 20100415; JP 5913778 B2 20160427; KR 101655746 B1 20160908; KR 20100036991 A 20100408; MX 2009010645 A 20100714; US 10016215 B2 20180710; US 10588661 B2 20200317; US 11801071 B2 20231031; US 2010081880 A1 20100401; US 2013317310 A1 20131128; US 2015335353 A1 20151126; US 2017119433 A1 20170504; US 2018280055 A1 20181004; US 2020179003 A1 20200611; US 8485970 B2 20130716; US 9131835 B2 20150915; US 9687272 B2 20170627

DOCDB simple family (application)  
**EP 09252312 A 20090929**; AU 2009222423 A 20090925; BR PI0904882 A 20090930; CA 2680917 A 20090929; CN 200910174114 A 20090930; JP 2009224137 A 20090929; KR 20090092194 A 20090929; MX 2009010645 A 20090930; US 201313922957 A 20130620; US 201514819716 A 20150806; US 201715408544 A 20170118; US 201816002346 A 20180607; US 202016788557 A 20200212; US 24276508 A 20080930